Chapter 7
Selecting and Monitoring AP4 Center Research Projects

Among the most important tasks of an AP4 center are choosing new research projects that meet the center's vision, mission, goals, and objectives, and deciding whether to continue or terminate ongoing projects. This requires a regular, formal proposal solicitation and review process and continuous project oversight. These processes are discussed below.

Soliciting Proposals for Research Projects

Although you identified at least three initial AP4 center research projects in your grant application, you will periodically need to initiate additional research projects. This process will be completed in two stages:

1. Soliciting proposals for research projects from investigators at your institution and possibly other institutions.
2. Reviewing and evaluating these proposals (described later in this chapter).

Center directors should solicit ideas for AP4 center research projects by issuing a proposal request. Proposal requests can be made through personal solicitations, open solicitations, or a combination of the two. Major differences between personal and open solicitations are outlined in Figure 7-1.

Figure 7-1: Options for soliciting AP4 center research proposals*

Solicit proposals from selected individuals	Open solicitation
• Obtain proposals from individuals with known skills and experience for review.	• Need to review proposals which may be submitted by investigators not known to the center's leadership.
• High yield, known quality.	• Unknown yield, unknown quality.
• Limits center investigators to a small group.	• Brings new investigators into the field.
Focus on single community of investigators	Solicit proposals from several institutions
• Increases control and keeps funds within the institution.	• Reduces control, but may expand fundraising prospects.
• Limits diversity of participating investigators.	• Recruits investigators with expertise in a broader array of disciplines.
• Reinforces home institution's commitment to AP4 center.	• Provides access to resources of other institutions.
Personal approach (e-mail and phone contacts)	Formal approach (written proposal request)
• Interactive, allows discussion of ideas and encouragement to participate.	• Less personal, likely to produce smaller yield if not combined with other approaches.
• Can be difficult to ensure that the information communicated is accurate and complete.	• Uniform message can be prepared in advance and distributed broadly.
• Time consuming.	• Relatively quick.

*Adapted from: "Advantages and Disadvantages of Proposal Solicitation Strategies," in Gray and Walters, p. 130.

The center director and partners may personally solicit proposals, by phone or e-mail, from individuals with the most relevant skills and experience. Or, the center may want to distribute a

proposal request more broadly so other investigators, including some not known to the center leadership, can submit ideas. The best way to gain the interest of researchers and solicit proposals may be a combined approach, or one quite different from the approaches suggested here, based on the center director's preference.

Preparation of Written Proposal Requests

Regardless of the initial solicitation method employed, center directors should prepare a written proposal request that clearly states the center's objectives and content requirements, and describes how proposals will be reviewed. The proposal request should be made available to interested parties in the form of a letter, flyer, or e-mail. A suggested format is provided in Figure 7-2.

Figure 7-2: Format for AP4 center proposal requests

- Center name.
- Contact person and contact information.
- Submission deadline.
- Where to send proposals.
- Brief description of the center and its goals and objectives.
- Proposal format (See Figure 7-3).
- Project presentation at the semiannual meeting.
- Method and timeline for proposal review.

Much of the information in the proposal request should be drawn from the center's strategic plan. For example, the center description should include the center's vision and mission statements. Requirements for proposals should be based on center goals and objectives.

The deadline for AP4 center project proposals should be approximately 1 month before the next semiannual steering committee meeting. This gives the center director, evaluator, and steering committee members sufficient time to read the proposals prior to the meeting, and provides enough time to schedule presentations by applicants at the meeting.

AP4 Center Research Project Proposals

AP4 center research proposals should be up to 15 pages in length, excluding the appendix. A suggested format for proposals is provided in Figure 7-3.

Figure 7-3: Format for AP4 center project proposals

- Project name.
- Lead investigator (name and CV).
- Other investigators (names and CVs).
- Project abstract, including the proposed cancer intervention.
- How the proposed project will meet AP4 center goals.
- Background
  - Related work performed previously.
  - Related work done elsewhere.
- Experimental plan.
- Uniqueness of the proposed project.
- Timeline.
- Measurable milestones.
- Budget estimate.
- Appendix (including publications).

Role of Partners in Developing Research Project Ideas

AP4 centers should encourage and facilitate interactions between investigators proposing new research projects and center partners. The center director may facilitate such interactions by encouraging, or even requiring, all investigators to consult with at least one center partner before submitting a research project proposal.

Alternatively, the center director may choose to request preproposals prior to the submission of a formal project proposal. Preproposals might be submitted in the form of 1-page letters of intent

(LOIs) that include the project title, research hypothesis, and a description of the intended intervention. The brief, informal nature of the LOI allows investigators to quickly put together new ideas and obtain feedback from the center director and partners. If the LOI generates interest among partners, the investigator should be encouraged to submit a formal proposal. Otherwise, the investigator should receive feedback on how the idea could be modified to meet center needs.

AP4 centers can also permit and even encourage partners to submit ideas for projects that they would like investigators to pursue through the AP4 center. Responses to these ideas can be solicited through the center's proposal request.

Selecting Research Projects

The center's process for reviewing, evaluating, and selecting research projects should provide a means of allocating center resources to projects in a way that is consistent with the center's strategic plan. However, the process must also meet the needs of AP4 center partners. For many partners, having the authority to select research projects and shape the center's work is the most important privilege of being a center partner. Steering committee members who do not have the opportunity to participate in the review, evaluation, and selection process may lose interest in attending semiannual meetings (see Chapter 8 for details on the semiannual meeting) and, ultimately, in continuing their partnership with the center.

Figure 7-4: Steps in reviewing, evaluating, and selecting research projects during the steering committee's semiannual meeting

1. Proposal review
   - Proposal presentation by investigator.
   - Open discussion and Q&A.
   - Written comments submitted by steering committee members.
   - Written comments reviewed by investigators.
   - Informal discussions of written comments between investigators and steering committee members.
2. Proposal evaluation
   - Review of steering committee comments.
   - Determination of whether each project meets the center's vision, mission, goals, and objectives.
   - Assignment of ratings.
3. Project selection
   - Decision, based on budget, regarding how many projects to fund.
   - Selection of projects with highest ratings.
   - Communication of steering committee decisions to investigators.

Proposal Review

Copies of all proposals received by the deadline should be distributed to steering committee members in a timely fashion so committee members have time to review the proposals before the semiannual meeting.

Each investigator who submits a proposal must schedule an oral presentation at the steering committee's semiannual meeting. Before the presentations begin, the director should remind committee members of the center's vision, mission, goals, objectives, and action plan. Each presentation should include a brief (15- to 20-minute) project overview, followed by a discussion with steering committee members. The AP4 center director should appoint someone to take detailed notes on the discussion. The director or a designate should ensure that presentations do not exceed the allotted time.

Allow 5 to 10 minutes following each presentation and discussion for steering committee members to record on a form their reactions to the proposals. The form should solicit comments on each project's scientific merit and ability to meet center goals, and the reviewer's level of interest in the project (see Appendix 3-3).

After each steering committee member completes the form, copies should be distributed immediately to all committee members, the center director, and the investigator. Ample time should be available during lunch and other meeting breaks for the investigator to discuss the comments with steering committee members.

Proposal Evaluation

Although the informal reviews provided by steering committee members during the meeting may seem to point in a single direction, it is important to conduct a formal, thorough, and fair evaluation of every project proposal submitted to the AP4 center. Schedule time toward the end of the semiannual meeting for this purpose. The discussion of each proposal (notes should also be taken on these discussions) should focus on evaluating the proposal's merits, including the cost/benefit ratio.

For each proposal, the steering committee should discuss:

- General observations about the research proposed.
- How the project might be improved, accelerated, or made more relevant to center goals and objectives.
- Whether project objectives can be measured, and what indicators and standards will be used.
- The likelihood that the project will result in a new anticancer intervention.
- Major obstacles to conducting the research.
- Additional information, expertise, or technology that should be brought into the project.
- Important issues for partners that the project should address.

Steering committee members should then rate the following aspects of the proposal:

- Relevance to center goals—20 points possible.
- Well-defined milestones that can be evaluated—20 points possible.
- Clear, feasible methodology and work plan—20 points possible.
- Likelihood that the project will translate to the clinic—20 points possible.
- Cost/benefit ratio—10 points possible.
- Research team qualifications—10 points possible.

The points assigned by each steering committee member to each proposal should be collected and tallied by the center evaluator.

Project Selection

Before the steering committee determines which research projects to support, its members should be made aware of the amount of funding available for projects, how many projects can be supported by the available funds, and which ongoing projects relate to the same target research areas. Once this is accomplished, the committee should select the most highly rated projects in

the desired topic areas. The center director should communicate the committee's decisions in written form to all investigators who submitted proposals.

Research Project Evaluation

After the projects have been selected and the investigators informed of the steering committee's final decisions, the center director, steering committee, and center evaluator need to oversee the progress of the funded projects and determine whether each is proceeding as promised in its proposal.

The steering committee will review interim reports, hear project presentations, and conduct formal evaluations for all funded projects at each semiannual meeting. Committee members will then decide whether or not to continue each project, based on answers to the questions below. These questions should be listed in an evaluation form to be completed by each steering committee member for each project funded by the center:

- Is the project meeting the milestones, timeline, and budget established at the outset?
- Have other resource requirements come to light?
- What is the quantity and quality of data generated by the project?
- How are the data being analyzed?
- Are project activities relevant to the project's original goals?
- Is the project still relevant to the interests of center partners?
- Are the PIs' reports satisfactory (see Chapter 8 for reporting requirements)?
- Given current resources (time, money, staff), is continuing the project feasible?

Finally, each steering committee member should determine whether, given their answers to the above questions, the project should be continued with no changes, continued with recommendations (which must be stated), or terminated. The steering committee should be prepared to terminate a project if it is clear that the project will not help meet center goals. This is typically necessary if an investigator or graduate student leaves the institution, preliminary results indicate that the line of inquiry is not promising, or insufficient effort has been devoted to the research. When a project is terminated, decisions must be made about how to allocate the resources originally dedicated to that project.

Project evaluation forms should be collected by the center evaluator, who will tabulate the results (see Chapter 9 for more on the role of the center evaluator). Based on these results, the steering committee will make a final decision about whether each project should be continued or terminated.

Clearly, AP4 centers must be flexible in their selection and oversight of research projects. Fortunately, because the steering committee has the authority to approve and terminate projects, decisions regarding a project's future can be made and implemented quickly.

References

Gray D.O., Walters S.G. (1998). *Managing the Industry/University Cooperative Research Center: A Guide for Directors and Other Stakeholders*. Columbus, OH: Battelle Press.